#### PLATE XI

Fig. 14.—Cystopteris fragilis. Entire plant and a portion of the pianna showing sori (S).

### PLATE XII

Fig. 15.—Onychium japonicum. Entire plant. Fig. 16.—Selaginella chrysorhizus, Entire plant bearing tubers (T), and a branch showing sporangia (sp).

## A BIRD PHOTOGRAPHER'S MUSINGS FROM KASHMIR

B

LT.-COL. B. T. PHILLIPS

### PART III

(Continued from Vol. 46, p. 500).

Birds of a Srinagar Garden

(With 6 plates).

Srinagar boasts many large-sized gardens enclosed in the compounds of the European quarter. They are havens of peace and charm; the lofty graceful poplars, the ancient mulberry with its gnarled trunk, the stately chenar, all provide ample shade from the rays of the summer sun; the soft green of its well-kept lawns, the flowering shrubs, ablaze with scented blossom, the kaleidoscopic effect of its extensive and well-ordered flower beds resplendent, at this time of the year, with worthy specimens of most of those flowers, the pride of a gardener in England, forms but a tithe of their beauty.

Most gardens find space for a vairety of fruit trees; these enclosures in the early Spring are a riot of delicately-hued almond, apple, peach and other varieties of fruit blossom: these orchards

forming later a favourite venue for a wealth of bird life.

These cool and peaceful surroundings are further brightened by the passing to and fro of a stream of birds that impose themselves on the view, their colour, calls and song demanding attention.

Mention must also be made of a few of the more striking species commonly seen at all times during the summer months: the Oriole, in its black and gold, with a bill full of fine grasses flies through the far-stretching branches of the broad-leafed Chenar, and is traced to its cradle nest stretched across the outermost fork of a slender branch; the beautiful male Paradise Flycatcher, either in chestnut or snowy white attire, with its restless fussiness, will be seen giving a display of adroit flycatching; the confiding Tickell's Ouzel of sombre garb, but in a measure, enchanting voice, will surely be hopping about the lawn either digging for a worm or standing erect inanely looking into space; that striking bird the Hoopoe also will be constantly in view busily quartering the lawn, probing for grubs and worms with its long slender bill and occasionally will show the glory of its fully expanded crest.

The particular garden forming the hunting ground described in this chapter, not only gave shelter to a host of passing migrants but also provided breeding sites annually for at least fifteen species of birds. Many halcyon days were spent in these peaceful surroundings with camera clicking at short intervals in an endeavour to portray a graceful form or record some interesting antic character-

istic of the species being studied.

With succulent fruit ripening in due season, the fruit eaters are also in their element; although at first much hustled by the paid urchin, set in the centre of the orchard to scare them away, they soon sum up the situation and decimate the crop. The normal contraption used as a 'scare', is a product on a 'no cost' basis—an old empty tin with its clapper of rock, hung from a tree in the centre of the plantation, is spasmodically worked by the lad pulling at an attached rope: at first the clanging disturbs the birds, but this only for a few hours, after which the rattle seems to be summed up as of nuisance value only, even to the extent that, while the din is on, they will busy themselves on the far side of the trees. inevitable and numerous bouts of 'forty winks' indulged in by the custodian are patiently awaited in order to work undisturbed havoc on the fruit. Continued bird watching convinces me that examples of such bird behaviour show signs of definite reasoning power and cannot be solely attributable to instinct.

While meditating over these things, the pipe of a passing little Kingfisher attracted my attention, its swift low flight carried it to a perch on a twig protruding from a plum tree and overhanging a fairly deep disused manure pit containing a certain amount of rank water. The following up of a bird that acts contrary to habit often provides interesting discovery. In this case with silvery minnow in bill seemingly 'at home' in a garden at a distance of half a mile from any known lake or stream, called for investigation. Soon a second Kingfisher emerging from this pit joined its mate on the plum tree, where, with a flirting of wings and ch'hee-ing the fish was ceremoniously handed over and duly swallowed by the new comer. Closer approach led to the discovery of the nesting tunnel in the bank, an unusual site for the nest of such a fresh-water loving

bird.

The nesting of this beautiful little bird alongside the gorgeous Golden Oriole and Hoopoe recalls to mind another occasion when these three species had nested together in close proximity the previous year; the story and its reactions may be worthy of note.

With houseboat moored in a nallah at Shalibug on the R. Sind

With houseboat moored in a nallah at Shalibug on the R. Sind I had just packed up my apparatus, having successfully taken a series of pictures of this Kingfisher from the dining room window of the boat, and having seated myself down on its roof for a sundowner, began reading a well-known English sporting paper: in it a letter to the Editor asked for due approval for the rare achievement of having seen during the season in the neighbourhood of his west country home—the Golden Oriole, Hoopoe and Common Kingfisher! As has already been stated, the Kingfisher had been photographed—the next on the list was a series of the Golden Oriole at home in the willows alongside, and to be taken from the roof of the house-

boat next day; across the narrow stream, in the roots of a mulberry on the opposite bank, and not twenty-five yards from the anchorage, a Hoopoe was brooding its six fresh eggs. This anecdote has not been included as a comparative achievement but in praise of Kashmir

as a bird lover's paradise.

After this digression let us return again to the burrow pit, where an interesting and instructive half hour was spent in watching the area. This half hour supplied sufficient material eventually to produce a veritable harvest of bird photographs. The very branch used by the Kingfisher was used in rapid succession by both male and female Paradise Flycatcher, the White-cheeked Bulbul, a Warbler and a Sparrow. There is undoubtedly a definite route to each nest which contains a series of perches—in the case of the Kingfisher, the branch was the final jumping off post for the nest; the Paradise Flycatcher used it as a springboard to swoop down and capture the gnats and flies attracted by the rotting vegetation and stagnant water; the others happened to be passers by and taking advantage

of a quiet drinking pool.

This introduction to the birds of a Srinagar garden cannot end without mention of its avian choruses, though these admittedly do not compare in quality with those heard in England on a Spring or Summer's day—the sound of the intermittent calls of the Cuckoo does create a homy atmosphere and recall many glorious days spent in pastures fair-yet the local choruses are worthy of record. Tickell's Thrush is the main songster in these parts and is the first to commence its sweet but somewhat sad singing in the grey dawn, when, uninterrupted, these fresh and bracing notes trill on the morning air; it is not until this extended concert subsides that a babel of call notes run riot and mark the general 'Reveille' in Birdland. Although there is a distinct decrease of song during the day, the avian world once again bristles with activity towards evening with Tickell's Thrush again the outstanding performer. sunset the Bulbul joins in with the Thrush, while both are searching out their perch for the night and set up a scolding and mournful twitter as if to bewail the end of a perfect day; having found a suitable perch, and before the hoot of the Owl, the Thrush once again pours forth its delightful evensong to herald in the night.

The following birds, though resident and most prominent during the winter months are omitted from this chapter as they disperse during the breeding season and are only occasionally found breeding in gardens: Kashmir Grey Tit, Himalayan Streaked Laughing Thrush, Rufous-backed Shrike, Scully's Wood Owl. The strictly aboreal Black Bulbul, a long slim bird rather larger than our cheery friend, the White-cheeked Bulbul, is mainly iron grey, its black head sports an unruly mop for crest and has bill and legs a bright coral-red; they visit these gardens for a short spell in late April and while busily gorging themselves on the variety of wild berries then ripe, draw attention to themselves by the raucous double call notes and gregarious habits. After a three weeks sojourn, they disperse to their breeding grounds up some of the Vale's side valleys.

Finally, a picture of the main species haunting gardens during the winter months can best be described by reference to the ways



The House Crow



The Jungle Crow



of the visitors at feeding time. When the hard winter weather sets in, with snow and frost denving birds their very livelihood, I have made a habit of feeding them, not through the medium of a bird table as this supply would be cornered and gobbled up by a horde of fearless and truculent Mynahs and quick-witted Jackdaws, but by a method of breaking up the supply of bread, cake or other available scrap and throwing it in such a way as to ensure a fair distribution for all visitors. The first piece thrown from the balcony is usually retrieved by Rastus, the friendly Jackdaw, who has now pested in a hole under the rafters of my bathroom for the past three years, he regards himself as a privileged person, and the locality, his own territory. Whether there are other birds present at the time or not is immaterial, crowds will arrive in arithmetical progression in answer to Rastus' summons that food is in the 'offing': this is a peculiarly unselfish trait, shown by all birds during hard times. Rastus, now with feathers fluffed, a picture of pride, takes up his perch near at hand, bread in bill, looking the embodiment of a 'King of the Castle'.

As each piece is thrown, a mêlée ensues in which Jackdaw, House Crow and even the giant Jungle Crow jostle with the Mynah for possession. This 'rough housing' is too much for the patient flocks of Sparrows and for the pair of Bulbuls in attendance-note, only a pair of Bulbuls, a vicious trait in their character does not permit any other bird of the species to trespass in their area: however their needs are attended to and the Bulbul's provender placed at one's feet, while that for the Sparrows, so powdered down as to be a negligible quantity for the bigger birds, is strewn about the boards. Should he still be pouting with pride, bread in bill, the cute Rastus will quickly discard it and capture the first piece of cake thrown. The ubiquitous Pariah Kite with its deft talons and unerring swoop provides the nightmare of the party, even to its ingrateful dive that seizes the morsel from the hand before it is thrown, but done with such accuracy that scarcely ever are the fingers scratched. Nevertheless, the cunning members of the Crow family seldom depart empty-handed. These are the birds that haunt one's doorstep at all times.

There are still two or three species that are not so bold but can also be served: the Grey Tit dotes over the kernel of the coconut, a piece suspended from a branch in the kitchen garden will draw him and his kind to it daily; though a bold minature bully, it was surprising to find that when the small Brown-fronted Woodpecker arrived and also relished the diet, the Tits gave it pride of place. A successful experiment drew a family of the Streaked Laughing Thrush into the area prepared for them in the kitchen garden. A thick bed of dry leaves freely sprinkled with unhusked rice was strewn round a puddle of water; as was hoped, the sight of their beloved hunting ground, at a time when dry leaves were at a premium, drew them, and the further discovery of a good supply of food there, tempted them to this area throughout the winter months; by the addition of blobs of suet, smeared on stones and twigs, the

site became the favourite rendezvous for most of the birds of the

Attempt will now be made to present intimate sketches of the individual species found breeding in this delightful spot.

# The Eastern Jackdaw: Corvus monedula soemmeringii.

By the unintiated, this glossy black bird may be mistaken for a crow, but its white eye should provide a distinctive feature for identification, the Jackdaw being the only member of the crow family provided with a white iris; when in company with crows, the smaller size and grey to whitish neck will become prominent by comparison. Numbers of the Jackdaws of Kashmir wear a distinctive white collar, just as many, are collarless, but as both types interbreed, there can be no question that there are two subspecies of Jackdaw present.<sup>1</sup>

Jackdaws are resident and plentiful throughout the Vale, where they breed profusely from May till July. When the five or six young are fully fledged, an increase in numbers possibly effecting the food supply, flocks go further afield and visit the higher margs. Their punctual arrival in Gulmarg does not vary by more than a

day or two after 7th August annually.

The amount and variety of material flown to their nesting hole is considerable; clods, grass, rags and wool are carried in in their turn, and as the nesting site is used annually, a problem arises as to where the previous rubbish goes. Normally six eggs are laid and are of a greenish-blue ground, speckled and spotted with shades of brown. There were four nests in this garden, two under the eaves of the building, the others in hollows in the boles of chenars. It is evident that these birds mate for life for, even

when in flocks, couples will be noticed hunting together.

They are not quarrelsome birds as a general rule, but Rastus, my semi-tame Jackdaw, with nesting hole under the rafters over the bathroom window, is most pugnacious of a morning on his return from the communal dormitory; he will sit on a balcony perch for long spells, eyeing his property even when it is not in use as a nesting site, and rudely hustle away any prospectors out house hunting; the only reason that can be put forward for this zealousness during the off season, is that the site must be used then as a storeroom; again and again it has been noticed that all scraps in excess of immediate needs are flown in and deposited, his quick return to rejoin in the affray for further scraps lends proof for the surmise.

In and around Srinagar large numbers haunt houses, gardens and fields picking up scraps where available, or with their stout bills vigorously unearthing grubs, 'leather jackets' and suchlike, obnoxious vermin admittedly, but how invoking to the peace of mind of an ardent gardener or perhaps a keen golf secretary is the resultant trail of damage done by them to lawns and putting greens.

<sup>&</sup>lt;sup>1</sup> The Jackdaw has a single moult in the year, in autumn. Abrasion of the silvery tips of the neck feathers by summer—more in some individuals than in others—causes them to appear blacker and almost lacking the whitish collar.—EDS.



The Jackdaw



Tickell's Thrush



His quickness of eye and unerring judgment in flight outwits other able opponents in attendance when scraps are thrown; quick off the mark, and should by any mischance he fail to seize the scrap in midair, he will dive into the mèlée and possibly seize it from under the very bill of a slower moving species.

At dusk all birds leave their day haunts and congregate into immense flocks before flighting noisily to a communal roosting area; great distances are covered by some flights. At early light, as if by order, the return flighting starts, parties of varying strength branching from the main throng to continue to their sub-areas.

The Jackdaw strikes me as a bird full of character and one that will survive on his wits; his innocent air and disarming call Jack, endears him in the eyes of a bird-lover, but even granting the great help given by his tactics to bird photography, he must be dubbed an arch marauder—the 'Bogey Man' of all breeding birds. Examples of these exploits in my descriptions of the habits of Jacana and Stilt show up his black side, yet in spite of all, he will always remain a most intelligent and loveable character.

# The White-cheeked Bulbul: Molpastes leucogenys.

India boasts a number of varieties of this cheerful family, all tame, confiding and familiar birds which become great favourites wherever met. It is considered that the White-cheeked Bulbul of Kashmir has no equal among them; its jaunty mannerisms and continual cheeriness endears it to all, its implicit trust in man soon becomes evident judging by the boldness shown in accepting tit bits offered, even to the taking of them from hand; tappings on a closed window and much chattering draw attention to the fact that entry to the feast has been denied them. Local boatmen assert that the pair of bulbuls in whose territory their 'dunga' houseboat is moored will, beyond paying the normal foraging visits at meal times, remain in the vicinity to cheer up the place should a guest be expected and further, in a psychic way, give warning of one about to pay a surprise visit.

The bird is a typical representative of the Bulbul family with a crest and tail patch and similarity of dress in both sexes. It is a resident and abundant in the Vale. The body plumage is a dull brown at a distance, but at close quarters shows the pleasing greenish tinge on the upper plumage; the white cheeks and bright sulphur-yellow tail patch add points to an otherwise sober garb, but it takes the highly developed black crest, directed forward, to complete the trim jaunty figure presented. Further research is necessary to determine whether Mr. Punch fashioned his headgear on this bird's crest. Be that as it may, the famous headgear common to both is a guarantee that all that contact them will be

inspired with good cheer.

Whether it be during times of plenty, or during the arduous snows, the inseparable pair will be seen following one another, uttering their lively calls and appearing to be as happy as sand boys.

The Bulbul has no song, but their many joyful and melodious calls of three to four notes each in an endless variety of combina-

tions, are attractive. Only a few stock phrases recur, otherwise a newly invented variation often repeated with gusto and pride, lays down a challenge to others to try and emulate so learned an utterance! Two cheery sentences commonly heard can be put into words: Tea for two and Take me with you. In entire contrast to this daylong cheeriness, a quaint sad chattering is set up towards sunset, and though the devoted Joan is in close and sympathetic attendance Darby remains inconsolable; this hysteria continues for periods of a quarter of an hour or so, during which the Bulbul flirts its wings and weeps copiously; an occasional emotional full-throated call is sandwiched between these wailings in order to attract, it is presumed, listeners from afar to these mutterings of his utter grief at sight of the fast setting sun.

Though so tame and confiding where human beings are concerned, they form fine sentinels for the avain throng and vie with the Common Mynah in giving timely warning of approaching

danger.

On one occasion great excitement prevailed over the sighting of a possible pair of hybrids, with red cheeks and a reddish-yellow tail patch; fortunately, owing to a wartime exhaustion of the supply of dust shot in Srinagar, the dangerous time lag of a day or two before the hoax was discovered was bridged, and the birds saved from extinction at the hands of some keen collector. The hotel bearers had thought fit to anoint this particularly confiding pair of Bulbuls, always in atendance in the dining room, with the red stain

so freely used during the 'Holi' festival.

The nest is a well-knit structure of roots, neatly lined with fibre and usually placed in a thick bush within reach of the ground, but a couple of pairs, more bold and confiding than the rest, built annually inside hotel living rooms—one, in the much frequented wireless room on a hanging gas lamp, the other in the ballroom on an electric lamp bracket continually in use. Although this familiarity was viewed with much disfavour by the hotel authorities for obvious reasons, broods as a rule were successfully reared amidst all this noise and bustle. The eggs, two or three to a clutch, are very handsome having a pinkish ground with spots and speckles in various shades of red.

In accordance with the system of size comparison used by wellknown ornithologists and copied by me, the Bulbul family of 8 in. average length, forms one of the stock sizes used to aid identification.

## Tickell's Thrush: Turdus unicolor.

Although of plain attire, this most delightful Thrush, the size of a Mynah, arrives in March and by its song and confiding ways endears itself to all. At any time of the day, especially in the early morning and at dusk, the green lawns will have their quota, showing birds gaining a yard or two at a time by a curious series of short and speedy hops before, either inanely staring into space or making a vicious thrust into the ground with the bill in search of their worm diet.

The song cannot be called monotonous as it consists of a fair compass of sweet notes well modulated, and with each burst of song ending in trills; in volume the song falls short of that of our Song Thrush at home but nevertheless it is a pleasing asset in any garden. Its plaintive yet delightful solos are at their fullest and best during the grey dawn, and it is not until these Thrush concerts have subsided, that the morning air begins to pulsate with the calls and songs of a horde of other birds. During the flighting of Jackdaws and other flocks of birds making for their chosen dormitory roosts, this Thrush has a curious habit of scolding while searching out a perch for the night; however when the light begins to fail, it pours forth a glorious evensong to herald in the night.

The nest is a deep cup composed of moss, roots and dry grasses, and is lined with fine fibres: no mud has been noticed in their makeup. The eggs, usually three in number, are greenish spotted and blotched with rufous. The nesting sites, though in the majority of cases averaging in height only about 10 ft. from the ground, are difficult to get at from a photographic standpoint as the nest is usually placed in the fork of a tree trunk and in dense shade; these sites, in spite of requiring much judicious clearing of the foreground, offer, in but the most favourable cases, a chance of getting direct sunlight to penetrate into the area and that, only

for short periods during a day's work.

I have only been able to steel myself to portray these birds at the nest on two occasions. The impression gained during the first sitting was that deep shade was imperative for the welfare of the young: their gaping and panting as soon as the light was let in aroused disconcerting pangs of guilt, however the reaction to this exposure shown by the self-sacrificing mother bird—her immediate arrival at the nest, regardless of possible danger, to give shade to her callow young even to the extent of having to be hustled by the male bird on his arrival at the nest to feed the young—made the second sitting possible, thus providing me with the Dufaycolor transparencies denied me at the first sitting owing to adverse weather conditions. All ill effects vanish however when the work has been completed and the nest again placed in deep shade, with the parents, apparently undisturbed, continuing to succour their young.

# The Himalayan Paradise Flycatcher: Tchitrea paradisi leucogaster.

While being paddled along the willow-bordered margin of Anchar Lake, a newcomer to Kashmir, a copper-coloured, Bulbul-like bird was seen, and in answer to my query, the Mussalman Kashmiri shikari named it Husseini Bulbul. While cogitating on an explanation for this reference in name to so revered a saint of the Muslim faith, another bird, mostly white with a pair of immaculate long streamers literally floated through the contrasty light and shade of the grove; it was then, when my informant pointed out that this was the male bird, that I made a mental note that its local native name had been well coined, and was not surprised on final identification to find that its name in English was Paradise

Flycatcher. It is in my estimation the most striking bird to be seen in these parts and a sight which makes even the least bird-

conscious pause in wonder.

The hen is of slim bulbul-like build, and though of similar size to the male, lacks the pair of long, thin, ribbon-like tail feathers and is of a rich chestnut-coloured upper plumage in contrast to the adult male's pure white. There is never any change of colour in the female plumage.

Later the same morning, replicas of the cock bird were often seen but with the white parts and streamers chestnut-coloured as in the hen birds; it was further noted that the streamers carried by them were of varying lengths, some just sprouting beyond the bulbul tail, others up to the average size carried by the white birds; proportionate to the length of these growing streamers, white patches on the wing coverts become noticeable; a reference to the bird books later proved that these copper-coloured birds were immature male birds during the stages of gradual transition before reaching the final immaculate white plumage of the adult male. This complete change over is not effected until after the third autumnal moult.

Once fully adult, except for the crested head and neck, which appear normally as a dark blue-black but changing in colour to an iridescent indigo-blue when exposed to direct sunrays, bill and spectacles that are a cobalt blue, and wing quills traced with fine black lines, the bird is pure white. Its pair of elongated streamers attain an average length of from ten to twelve inches in excess of the normal tail feathers: many patriarchs though, carry sets exceeding this by quite six inches or more.

In company with the Golden Oriole, the Paradise Flycatcher is among the latest of the summer migrants to arrive; the latter half of April sees them in and few remain after the beginning of

September.

The seemingly unbalanced flight, due to the exaggerated tail streamers, offers small resistance to the speed and accuracy of the swoops, the snap of the bill seldom fails to seize its fast-flying prey, but should it fail, the unchecked and perfectly controlled flight leaves no doubt as to the success of the second snap. Their restless fussiness and incessant sallies from the depths of the shady foliage through light and shade emphasises the pure silvery plumage of the adult male, as the bird flutters erratically through space with long waving streamers trailing behind. These manoeuvres keep them in view throughout the day.

The nest is an exquisite affair. A deeply-cupped inverted cone, built of fibres neatly woven together and ornamented on the outside with blobs of cobweb; it is very snug and comfortably lined with a silky down. The eggs, three to four in number, are very handsome reddish eggs. Semi-submerged willow groves are most favoured; here nests may be found not more than 5 ft. to 6 ft. from the surface of the water, but in gardens, the safety of a shady chenar is usually sought and nests as a rule vary in height from

20 ft. to 40 ft. from the ground.

The male bird is very intolerant of intruders and will often give away the position of a nesting site by his excited and petulent cries of Weep poor Willie weep—poor Willie, as he dashes at all comers in his characteristic somewhat wobbly flight. In spite of this vigilance, the contents of many nests are destroyed by shrike or crow.

It is not only a delight to watch a brooding pair, but a gift to the photographer, as both male and female share in incubation to such an extent that a change over at the nest takes place within the half hour, offering many chances of picturing both birds alongside one another. A much prized Dufaycolour slide, not only emphasises the colour contrast between cock and hen but also depicts the male's delight at his visit to the nest, sitting bolt upright tail feathers splayed out, twittering sweet nothings to his sitting mate.

In common with all birds that prefer shady sites, there is much to be done in order to let the sunlight into the arena. Fortunately for pictures of this bird, their beloved willow saplings are pliable and amenable to much bending; a rope, a heave and that willow is controlled, and so on, if necessary, ad infinitum; once the sun is thus harnessed the rest is comparatively easy as the subjects are not shy.

# The Indian Oriole: Oriolus oriolus kundoo.

Ornamental associates of the fascinating Paradise Flycatcher in gardens and willow groves are the handsome and richly coloured Golden Orioles—the males in their bright golden yellow plumage except for the black wings and central tail feathers, the females, less striking, with upper plumage a yellowish green, a sullied white streaked brown beneath, and brown wings—supply an additional touch of life and brilliance to the many spacious and restful private gardens in Srinagar. These birds are of medium size, solidly built, and larger than a mynah.

As breeding migrants, Orioles visit Kashmir; large numbers reach the Vale in late April, and having completed their breeding,

disappear again by the beginning of September.

Except for a harsh cawing call uttered in soliloquy, and the continuous string of peevish imprecations hurled at unwelcome intruders into their zone, these birds have an extensive repertoire of pure loud melodious notes most pleasant to hear, especially those oft-repeated triple call notes, which are both varied and attractive. Although Orioles are not the first birds to greet the dawn, yet, once started, the volume of their liquid notes—for song they have none—dominates a multi-voiced avian concert. The charm of those mellow flute-like calls must be heard to be fully appreciated.

About noon one sunny morning, while returning from a shikara trip across the Anchar Lake, and nearing some narrow willow-covered promontories jutting out into the water, a Golden Oriole festival was seen to be in full swing. These graceful willow groves backed up by Mahadev's still snow-capped ridge and reflected in detail on the still blue waters of the lake, formed the picturesque

setting. At the outset, superimposed on this scene were some six excited Orioles increasing in numbers eventually to twenty birds, who not only added further colour, but provided a large amount

of interest to the watcher.

The keen rivalry shown by the male birds, the frequent use of a variety of call notes, the flash of brilliant plumage in the sunlight during the chase from tree to tree with flight, now dipping, now erratic, the flirting of the wings, the spead of the tail, crammed into a nutshell the ways of the Oriole and stamped the scene as a normal deal in their Marriage Market. Attracted by the calls and excitement from this area, every Oriole within hearing, male and female, gathered round as interested spectators and encouraged the contestants with well-modulated and persuasive calls. The original party had gathered in this grove to settle the ownership of the two hen birds in the party. Judging by the guile shown by one of the hens in the party and her antics, she must have been a female of vast experience; when the contestants were on the point of exhaustion. she flew away out of the area and from her new perch uttered her harsh caw getting no response to this, she again entered the arena -her next flight however was successful for, in answer to her further squawk, one of the male birds followed her and with this, the drama must have ended, for the crowd of Orioles automatically dispersed in all directions,

This encounter with a crowd of Golden Orioles was a great occasion: normally the birds are seen in pairs following one another from tree to tree, and are usually the only members of that species

within that given area.

Though shy and more heard than seen, these Orioles will brook no interference in their nesting areas and will boldly attack with great determination all comers; the swift direct flight, attended by a string of petulant cries, carries on the furious onslaught until the

intruder is driven out of the area.

In the Plains there appears to be a pact between the Oriole and that other firebrand, the King Crow; the fury of their assaults on trespassing crows, falcons and kites are spectacular and worth watching. It has been noticed that the friendly cheery Bulbul is permitted to intrude in this zealously guarded area, even to the extent of nesting in the same tree as either of these 'thrusters', thereby enjoying immunity from the attack of their many enemies.

The nest is a grass hammock slung in a slender fork near the extremity of an overhanging branch, usually very difficult to reach from ground level: it looks a bulky affair with fibres and other oddments dangling down in haphazard fashion, but a closer view will show that the basic binding material—narrow strips of strong coarse grass—supplying the support to carry the nest, is firmly bound round the prongs of the chosen fork and the deep neatly-woven cup, forming the egg-chamber, is strongly bound to the base. The eggs, three or four to a clutch, are a bright shining white with black or reddish brown spots thinly distributed over the whole surface of the egg.

In Kashmir these birds used to breed freely in the semisubmerged willow groves bordering Anchar Lake; their taste there

Male feeding chicks







Female at nest



for suspending their nests low, often only 6 ft. over the surface of the shallow water, presented a gift to the photographer. Times have changed. Owing to the influx of those innately-keen and insatiable naturalists—British schoolboys—the birds have taken to the safety afforded by mighty chenars and now build out of reach of both, the budding ornithologist and the harmless photographer. There has always been great difficulty in obtaining a good set of pictures of the Orioles at the nest owing to their breeding season synchronizing with boisterous monsoon weather when high winds are answerable for many failures, as, during the split second delay between button press and shutter release, the slender twig on which the nest is slung is often blown out of the prefocussed area.

# The Himalayan Starling: Sturnus vulgaris humii,

The iridescent sheen on head, neck and mantle of green, purple or coppery-red which sparkles in sunlight when the bird is near at hand, disappears in the distance, giving to the Starling the appearance of a glossy black bird, more particularly so as by the time of arrival in Kashmir the buff edgings to the feathers have been worn away. Though of similar size, the bird is of stouter build than the Bulbul.

The Starling is among the first migrants to arrive in Kashmir, appearing with unfailing punctuality close on the heels of the Swal-low; over a period of three years, the first arrivals have been noticed on the 27th February. Soon after this date flock upon flock invade the land, many remaining to breed, while others pass on to breeding grounds in Central Asia and even Siberia. A stream of flocks, each numbering from twenty to thirty birds, use this route again during September when on their return flight to winter quarters in India. During the intervening months, the period of the breeding season, though birds may be seen in company on favoured lawns, it is obvious that now all team work is dormant, individuals being occupied mainly on family chores.

The effects of ruthless persecution in their winter haunts in India, possibly well merited by the great damage done by flocks to crops and fruit, and also, though perhaps not so well merited, for their tastiness in starling pie, has produced a species of markedly nervous disposition. 'There's not to reason why'—a whole flock busily foraging on the lawn one moment will rise in unison in answer to a squawk from a single member and manoeuvre with great precision until reaching the topmost branches of some tree; from this vantage point, after a spell of preening of feathers, the birds will glide down to the ground, following the leader in ones and twos to continue their foraging. This solidly-built glossy black bird, made to appear top-heavy by its stout yellow bill, never hops but its quick deliberate step gives to a flock an air of hustle.

The Starling's pride in the delivery of its song knows no bounds; with bill raised to the skies and wings shivering, it utters its lengthy and varied song with such gusto and persistence, that surely it must be an untutored human ear with limited compass that

fails to catch the subtle intonations it must contain, registering as it does but a jarring unpleasant jumble of discordant sound.

The birds tend to colonise when breeding, their loosly-knit and untidy nests are of grass lined with feathers and placed in holes, those in willows being mostly favoured; other suitable sites are found under rafters in buildings or even holes in banks. The six eggs are of a very pale blue. It is strange and therefore noted here that, in these breeding territories, single eggs freshly laid, are often found lying deserted on the ground within a few feet of known occupied nesting holes.

# The Common Mynah: Acridotheres tristis.

Anywhere in India from the moment the ship anchors at a port of disembarkation until your wanderings take you over 8,000 ft. above sea level, this vinous brown bird, with bright yellow bill, legs and eye patch, and if in flight, the prominent white streak in each wing, will be met. It is one of the commonest birds in Kashmir where it is resident. Its length of 10 in, is also used as a stock

size in the system of comparative measurement.

From very first introduction it becomes obvious that the bird is a character, inordinately conceited and a clever opportunist, he is always in company with and ably backed up by his devoted mate; his bullying propensities may not be evident at first, but will not escape attention. The species is very sociable, and except during the breeding season, will be met in flocks of varying strength, yet always hunting in couples within the flock; further, this species, in common with other residents that are not spurred on by the Spring and Autumn urges to cover immense distances in migration, collect daily at dusk in large parties and fly off to distant roosting areas, here pandemonium reigns till dark, with even minor outbreaks throughout the night.

Their solid frame upright bearing and jaunty purposeful walk entitles them seemingly to an undisputed right of way; they will sum up a passer-by as harmless and make way for him at the last moment and return immediately to the spot to carry on the good work, but at other times, some instinct will prompt when, with a querulous cry, the Mynah will take to wing and fly away well out of reach. As a family, their familiarity and boldness give them the main pickings when ploughing or weeding is in progress, individuals will seize an uncarthed grub hardly before the digging implement has been withdrawn from the soil; other species, though present at the time, are less trusting and thus forego many a lus-

cious morsel.

All other species place implicit trust in the Mynah's undisputed watchfulness, its alarm is sufficient to make all scatter to instant safety; occasional false alarms are given by irresponsible individuals but these only with a view to dispersing the assembled throng in order to pick up at leisure the deserted tit-bits.

Their chatter drawn from an immense vocabulary is endless; and though not attractive to the human ear, the confidence in delivery, the puffed out feathers, and the assertive bobbing of the